

A LIST OF TAXA OF INDIAN FERNS NOT INCLUDED IN BEDDOME'S HANDBOOK TO THE FERNS OF BRITISH INDIA AND A SUPPLEMENT TO THE HANDBOOK TO THE FERNS OF BRITISH INDIA¹

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A list of additional fern taxa reported from India after the publication of Beddome's Handbook to the Ferns of British India (1883) and its supplement (1892) is provided with the authority of such reports and distribution in India.

It is nearing one hundred years since Beddome, who belonged to the forest service of the then Presidency of Madras from 1856 to 1882 presented a comprehensive summary of all the known Indian species of ferns in his HANDBOOK TO THE FERNS OF BRITISH INDIA, CEYLON AND MALAY PENINSULA (1883). His further observations enabled him to publish a supplement to his Handbook in 1892. After these monumental works several novelties have been discovered from various parts of Indian territory. Information about them and information about the heterosporous Indian ferns which Beddome (1883, 1892) did not include are scattered in numerous publications and the present paper is an attempt to bring together all these informations in the form of a list with its original citation and localities in India to make the task easier for any one who takes up the revision of ferns of India. For new records reported for the first time from India, the publication reporting this is also given in addition to the original citation. The list, which by no means can be claimed to be complete, is arranged in alpha-

betical sequence. Further additions will be reported subsequently.

In some cases synonyms are also provided to fix the identity.

Acrostichum speciosum Willd. Sp. Pl. 5: 117, 1810; Thothathri *et al.* in Journ. Bomb. nat. Hist. Soc. 74: 249, 1977.

Distribution: Great Nicobar Islands.

Actiniopteris semiflabbellata Pichi-Serm. in Webbia 17: 24, f. 4. 1962; Ito in Hara Fl. East. Himal. 458, 1966.

Distribution: E. Himalaya.

Adiantum assamicum Nayar in Bull. Nat. Bot. Gard. 94: 1, 1964.

Distribution: Gauhati, Assam.

Adiantum capillus-junonis Rupr. Distr. Cr. Vasc. Ross. 49, 1845; Panigr. in Bull. Bot. Surv. India 2: 312, 1960.

Distribution: Eastern India.

Adiantum cuneipinnulum Nair et S. R. Ghosh in Acta Bot. Indica 2: 78, 1974. *Adiantum cuneatum* Langsd. et Fisch. in Ic. Fil. 23, t. 26, 1810 (non Forst, 1786); Mehra and Bir in Research Bull. (N.S.) Panjab Univ. 15 (Pt. I-II): 105, 1964 (non *A. raddianum* Pr. Tent. 158, 1836).

Distribution: Darjeeling, Tamil Nadu, Kerala.

Adiantum incisum Forsk. Fl. Aeg. 187, 1775.

Distribution: Throughout India.

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Adiantum indicum Ghatak in Bull. Bot. Surv. India 5: 71, 1963.

Distribution: Orissa, Bengal.

Adiantum refractum Christ in Bull. Ac. Geogr. Bot. Mans. 1902: 224, 1902; Mehra and Bir in Res. Bull. (N.S.) Panjab Univ. 15 (Pt. I-II): 106, 1964.

Distribution: Lachen Valley, North Sikkim.

Adiantum thalictroides Willd. ex Schl. Abmbr. Pl. 5: 53, 1832; Nair et Ghosh in Journ. Bomb. nat. Hist. Soc. 75: 246, 1978.

Distribution: Peninsular India.

Adiantum zollingeri Mett. ex Kuhn. in Ann. Mus. Lugd. Bot. 4: 280, 1869; Ghatak in Bull. Bot. Surv. India 5: 75, 1963.

Distribution: South India.

Alsophila henryi Bak. in Bull. Misc. Inf. Kew. 1898: 229, 1898. *Cyathea henryi* (Bak.) Copel. in Philipp. Journ. Sci. Bot. 4: 38, 1909; Holtt. in Kew Bull. 19: 478, 1965.

Distribution: Sikkim.

Angiopteris crassipes Wall. (Cat. no. 187. 1828 nomen) ex Presl, Suppl. Tent. Pterid. 23, 1845; Bitter in Engl. Pfl.-fam. 1, 4: 438, 1900; Nishida in Hara Fl. East. Himal. 454, 1966.

Distribution: Ghorwa Sanichare.

Angiopteris salicifolia (Presl) de Vries, Monogr. 34, 1853; Bitter in Engl. Pfl.-fam. 1, 4: 439, 1900; Nishida in Hara Fl. East. Himal. 454, 1966. *Psilodochea salicifolia* Presl, Suppl. Tent. Pterid. 28, 1845.

Distribution: Darjeeling.

Angiopteris wallichiana Pr. Suppl. 22, 1845; de Vries, Monogr. 27, 1853.

Distribution: Himalayas.

Angiopteris wightiana de Vries, Monogr. 28, 1853.

Distribution: India (Peninsula)

Antrophyum callifolium Bl. Enum. Pl. Java 111, 1828; Dixit et Nair in Journ. Indian Bot. Soc. 53: 283, 1974.

Distribution: South Andamans.

Antrophyum henryi Hieron, in Hedw. 57: 208, 1915; Dixit et Nair in Journ. Indian Bot. Soc. 53: 281, 1974.

Distribution: Arunachal Pradesh, Sikkim.

Arachniodes assamica (Kuhn) Ching. Acta Bot. Sin. 10: 256, 1962. *Aspidium assamicum* Kuhn. Linn. 36: 108, 1869. *Polystichopsis assamica* (Kuhn) Tagawa in Journ. Jap. Bot. 33: 94, 1958. *Byrsopteris assamica* (Kuhn) Morton in Amer. Fern. Journ. 50: 153, 1960.

Distribution: Assam.

Arachniodes carvifolia (Kunze) Ching in Act. Bot. Sin. 10: 256, 1962; Nair in Bull. Bot. Surv. India 11: 186, 1969. *Aspidium carvifolium* Kunze in Bot. Zeit. 283, 1848, *Rumohra carvifolia* Ching in Sinensis 5: 60, 1934.

Distribution: Eastern India.

Araiostegia beddomei (Hope) Ching in Chien et Chun Fl. Republ. Pop. Sin. 2: 288, 1959; Panigr. in Bull. Bot. Surv. India 2: 313, 1960. *Davallia beddomei* Hope in Journ. Bomb. nat. Hist. Soc. 12: 527, 1899.

Distribution: E. India.

Araiostegia perdurans (Christ) Copel. in Univ. Calif. Publ. Bot. 12: 400, 1931; Ito in Hara Fl. East. Himal. 468, 1966. *Davallia perdurans* Christ in Bull. Herb. Bioss. 6: 970, 1898.

Distribution: Himalayas.

Arthromeris lungtauensis Ching in Contr. Inst. Bot. Nat. Acad. Peiping 2: 98, 1933; Tagawa in Fl. East. Himal 490, 1966.

Distribution: E. Himalaya.

Arthromeris jarrettii Sastry et Chowdhury in Bull. Bot. Surv. India 11: 442, 1969.

Distribution: Subansiri District, N.E.F.A.

Asplenium affine Sw. forma **majus** Sledge in Kew Bull. 15: 408, 1962.

Distribution: South India.

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Asplenium crinicaule Hance var. **sikkimense** Bir in Journ. Indian Bot. Soc. 43: 564, f. 9-12, 1964.

Distribution: Eastern Himalaya.

Asplenium decrescens Kunze, Linn. 24: 261, 1851.

Distribution: Nilgiri.

Asplenium elasticum Fee, Gen. 196, 1850-1852.

Distribution: India.

Asplenium falcatum Lam. var. **bipinnatum** Sledge in Bull. Brit. Mus. (Nat. Hist.) Bot. 3: 262, 1965.

Distribution: Western Ghats.

Asplenium indicum Sledge in Bull. Brit. Mus. (Nat. Hist.) 3: 264, 1965. *Asplenium planicaule* Wall. ex Mett. in Abhandl. Senckenb. Naturforsch. Ges. 3: 201, 1859 (non Lowe, 1858). *Asplenium laciniatum* sensu Bedd. Handb. Ferns Brit. India 154, 1883 pro parte non D. Don.

Distribution: Kerala, Kumaon to Assam.

Asplenium khasianum Sledge in Kew Bull. 15: 397, 1962.

Distribution: E. Himalayas.

Asplenium laciniatum Don var. **acutipinna** Bir in Journ. Indian Bot. Soc. 43: 558, f. 5-6, 1964.

Distribution: Darjeeling, Sikkim, N.E.F.A., Himalaya, South India.

Asplenium laciniatum Don var. **subintegritifolium** Hook. Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15: 157, 1964; Bir in Journ. Indian Bot. Soc. 43: 558, f. 3-4, 1964.

Distribution: Darjeeling, North Sikkim.

Asplenium nidus Linn. var. **acutifolium** Bir in Journ. Indian Bot. Soc. 43: 567, 1964. *Distribution:* Sikkim.

Asplenium nitidum Sw. Syn. Fil. 84: 280, 1806; Sledge in Bull. Brit. Mus. (Nat. Hist.) Bot. 3: 265, 1965. *Asplenium glaucophyllum* Alderw. van Rosenb. in Bull. Jard. Bot. Bui-

tenz. Ser. 2, 7: 6, 1912; Holt. in Fl. Mal 2: 440, 1954.

Distribution: South India, Himalayas.

Asplenium obscurum Blume, Enum. Pl. Jav. 2: 181, 1828; Sledge in Bull. Brit. Mus. (Nat. Hist.), Bot. 2: 247, 1965. *Asplenium cristatum* Wall. Cat. 9. n, 211, 1829 nomen (non Lam. 1786).

Distribution: Nilgiri and Palni Hills and North India.

Asplenium paucivenosum (Ching) Bir in Bull. Bot. Surv. India 4: 3, 1962; Mehra et Bir in Res. Bul. (N.S.) Panjab Univ. 15: 159, 1964. *Ceterach paucivenosa* Ching in Bull. Fan. Mem. Inst. Biol. 2: 210, t. 28, 1931. *Ceterachopsis paucivenosa* Ching in Bull. Fan. Mem. Inst. Biol., Bot. Ser. 10: 9, 1940. *Distribution:* Darjeeling, North Sikkim.

Asplenium paucivenosum (Ching) Bir forma **majus** Bir in Amer. Fern. Journ. 62: 46, 1972.

Distribution: Darjeeling, Sikkim.

Asplenium perakense Matthew et Christ, Journ. Linn. Soc. 39: 214, 1909; Panigr. in Bull. Bot. Surv. India 2: 314, 1960. *Distribution:* E. India.

Asplenium planicaule Wall. var. **obtusa** Bir in Journ. Indian Bot. Soc. 43 (4): 561, f. 8, 1964. *Distribution:* Darjeeling, North Sikkim, Shilong, Cherrapunjee, Orissa.

Asplenium planicaule var. **yoshinagae** (Mak.) Tagawa., Bir in Journ. Indian Bot. Soc. 43: 562, 1964. *A. yoshinagae* Mak. Phan. Pter. Jap. Ic. 3, t. 64, 1900. *Distribution:* Himalayas.

Asplenium pseudolaserpitifolium Ching ex Tardieu et Ching in Notul. Syst. (Paris) 5: 150, 1936; Ito in Hara Fl. East. Himal. 488, 1966. *Distribution:* Himalayas.

Asplenium rockii C. Chr. Contrib. U. S. Nat. Herb. 26: 332, t. 27, 1931 et Ind. Fil. Suppl.

3: 37, 1934; Balkr. et Hazra in Bull. Bot. Surv. India 6: 315, 1964.

Distribution: Assam, Andhra Pradesh.

Asplenium sarelii Hook. in Blakiston, Five months on the Yangtsze 363, 364, 1862; Bir et Sukla in Nova Hedwig. 16: 477, 1968. *Asplenium saulii* Baker in Hook. et Baker Syn. Fil. ed. 2: 216, 1874; Hope in Journ. Bomb. nat. Hist. Soc. 13: 661, t. 18, 1901 (excl. Syn. *A. pekinense* Hance).

Distribution: N. W. India.

Asplenium tenerum Forst. f., Florul. Ins. Austr. Prodr. 80, 1786; Sledge in Bull. Brit. Mus. (Nat. Hist.), Bot. 3: 253, 1965. *Asplenium elongatum* Sw. Syn. Fil. 79, 1806; Hook. Sp. Fil. 3: 117, 1860.

Distribution: South India.

Asplenium unilaterale Lam. var. *majus* (C. Chr.) Sledge in Bull. Brit. Mus. (Nat. Hist.) Bot. 3: 246, 1965.

Distribution: North and south India.

Asplenium unilaterale Lam. var. *unilaterale* Mehra & Bir in Res. Bull. (N.S.) Panjab Univ. 15: 157, 1964.

Distribution: North Sikkim.

Athyrium crenatum (Sommerf.) Rupr. ex Nyland. Spicil. Pl. Fenn. 2: 14, 1844; Stewart, Bull. Torr. Bot. Club, 72: 413, 1945. *Aspidium crenatum* Sommerf. vet. Ak. Handl. 1834: 104, 1835.

Distribution: Himalayas.

Athyrium aff. *flabellulatum* (Clarke) Tard-Blot.; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15: (Pt. I-II), 140, 1964.

Distribution: North Sikkim.

Athyrium himalaicum R. C. Ching ex Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15 (Pt. I-II): 137, 1964.

Distribution: North Sikkim, Eastern Himalayas.

Athyrium mackinnoni (Hope) C. Chr. Ind. Fil. 143: 1905; Stewart in Bull. Torr. Bot. Club 72: 414, 1945; Journ. Indian Bot. Soc.

30: 139, 1951. *Asplenium mackinnoni* Hope in Journ. Bot. 34: 124, 1896; Journ. Bomb. nat. Hist. Soc. 14: 122, 1902.

Distribution: Trans-Indus to Sikkim, Pahlgam.

Athyrium mehrae Bir in Nov. Hedw. 4: 165; 1962; Mehra & Bir in Res. Bull. (N.S.) Panjab Univ. 15 (Pt. I-II): 140, 1964.

Distribution: Sikkim.

Athyrium nigripes (Bl.) T. Moore Ind. Fil. 39, 1857; 98, 1858; Sledge in Ann. Mag. Nat. Hist. Ser. 12, 9: 454, t. 14, 1956; et Bull. Brit. Mus. Nat. Hist. 2: 285, 1962. *Aspidium nigripes* Bl. Enum. Pl. Jav. 2: 162, 1828. *Asplenium nigripes* (Bl.) Hook. Sp. Fil. 3: 222, 1860; Hope in Journ. Bomb. nat. Hist. Soc. 14: 119, 1902.

Distribution: Assam, Sikkim, Nilgiris.

Athyrium puncticaule (Bl.) Moore, Ind. Fil. 186, 1860; Sledge in Bull. Brit. Mus. Nat. Hist. Bot. 2: 288, 1962.

Distribution: South India.

Athyrium rupicola (Hope) C. Chr. Ind. Fil. 145, 1905; Stewart in Bull. Torr. Bot. Club 72: 414, 1945. *Asplenium rupicola* Hope in Journ. Bomb. nat. Hist. Soc. 12: 531, t. 5, 1899.

Distribution: Kashmir to Kumaon, Punjab, Simla.

Athyrium setiferum C. Chr. Ind. Fil. 146, 1905. *Asplenium tenellum* Hope in Journ. Bomb. nat. Hist. Soc. 12: 529, t. 4, 1899 (non Roxb. 1816 nee Fee 1850-52).

Distribution: Himalayas, W. Nepal.

Athyrium solenopteris (Kunze) T. Moore var. *pusillum* (Kunze) T. Moore Ind. Fil. 187, 1860; Sledge in Ann. & Mag. Nat. Hist. Ser. 12, 9: 457, t. 15, 1956; et Bull. Brit. Mus. Nat. Hist. 2: 287, 1962; Bir et Vasudeva in Journ. Bomb. nat. Hist. Soc. 68: 186, 1971.

Distribution: Nilgiris.

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Athyrium subtriangulare (Hook.) Bedd. var. **sikkimense** Bir in Nova Hedw. 4: 168, f. 9-11, 1962; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15: 143, 1964.

Distribution: North Sikkim.

Azolla imbricata (Roxb.) Nakai in Bot. Mag. Tokyo 39: 185, 1925; Ito in Hara Fl. East. Himal. 500, 1966. *Salvinia imbricata* Roxb. ex Griff. in Calcutta Journ. 4: 470, 1844. *Distribution:* E. Himalaya.

Azolla pinnata R. Br. Prod. Fl. N. Holl. 167, 1810; Bak. Handb. 138, 1887; Eng. et Prantl No fl. 401, 1902; Tiwari in Journ. Indian Bot. Soc. 43: 451, 1964; Panigr. in Bull. Bot. Surv. India 2: 1960.

Distribution: Madhya Pradesh, Orissa, E. India.

Belvisia mucronata Sledge in Bull. Brit. Mus. Nat. Hist. Bot. 2: 140, 1960.

Distribution: Western Ghats, Eastern India.

Bolbitis deltigera (Wall. ex Clarke) C. Chr. Ind. Fil. Suppl. 3: 46, 1934; Nayar et Kaur, Bull. Nat. Bot. Gard. Lucknow 88: 41, 1964. *Meniscium deltigerum* Wall. Cat. 59, 1828 ex Clarke in Trans. Linn. Soc. 2, Bot. 1: 572, 1880. *Campilium deltigerum* (Wall. ex Clarke) Copel. in Phil. Journ. Sci. 37: 387, f. 38, 1928.

Distribution: N. E. India.

Bolbitis kanarensis Nayar et Chandra in Amer. Fern. Journ. 54: 19, 1964; Nayar and Kaur in Bull. Nat. Bot. Gard. Lucknow 88: 48, 1964.

Distribution: Western slopes of the Western Ghats in Belgaum-Goa Region.

Bolbitis semicordata (Moore) Ching var. **incisa** Nayar et Chandra in Amer. Fern. Journ. 54: 15, 1964; Nayar et Kaur in Bull. Nat. Bot. Gard. Lucknow 88: 61, 1964. *Distribution:* Kerala, North Kanara.

Bolbitis undulata (Wall.) Ching in C. Chr. Ind. Fil. Suppl. 3: 50, 1934; Nayar et Kaur Comp. Bedd. Handb. Ferns Brit. India 102,

1974, *Notholaena undulata* Wall. Cat. 140, 1828.

Distribution: N. E. India.

Bolbitis virens (Wall. ex Hook. et Grev.) Schott. Gen. Fil. ad. t. 14. 1834; Nayar et Kaur in Bull. Nat. Bot. Gard. Lucknow 88: 71, 1964. *Acrostichum virens* Wall. ex Hook. et Grev. Icon. Fil. t. 221, 1831. *Lepthochilus virens* (Wall. ex Hook. et Grev.) C. Chr. Ind. Fil. 288, 1906.

Distribution: Western Ghats, Sikkim, Burma, Siam.

Botrychium daucifolium Wall. ex Hook. et Grev. var. **parvum** v. A. v. R. in Bull. Jard. Bot. Buitenz. 1: 3, 1911; Suppl. Malayan Ferns 445, 1916. *Sceptridium daucifolium* Wall. ex Hook. et Grev. var. **parvum** (v. A. v. R.) Nishida in Journ. Jap. Bot. 41: 319, 1966.

Distribution: Himalayas.

Botrychium lanuginosum Wall ex Hook. et Grev. var. **nepalense** (Nishida) Nair et Dixit comb. nov. *Japanobotrychium lanuginosum* (Wall.) Nishida ex Tagawa var. **nepalense** Nishida in Journ. Jap. Bot. 41: 319, 1966. *Distribution:* Himalayas.

Botrychium multifidum (Gmel.) Rupr. Beitr. Zur. Pflanzenkunde de Russ. Reiches. 11: 40, 1859; Panigr. et Dixit in Bull. Bot. Surv. India 9: 286-287, 1967, ssp. **multifidum**. *Osmunda multifida* Gmel. Nov. Comment, Acad. Petrop. 12: 517, 1768. *Botrychium multifidum* var. **dichotomum** Farwell in Rep. Mich. Acad. Sci. 18: 87, 1916. *Sceptridium multifidum* (Gmel.) Nishida var. **multifidum** ex Tagawa in Journ. Jap. Bot. 33: 200, 1958.

Distribution: Sikkim: Lachen Valley.

Cheilanthes dubia Hope in Journ. Bomb. Nat. Hist. Soc. 12: 528, 1899. *Aleuritopteris dubia* (Hope) Ching in Hong Kong Nat. 10: 200, 1941.

Distribution: Dehra Dun and Mussorie.

Cheilanthes hancockii Bak. in Kew Bull. 1895: Ito in Hara Fl. East. Himal. 460, 1966.
Distribution: Himalayas, Kalimpong, Gangtok.

Cheilanthes keralensis Nair et Ghosh in Journ. Indian Bot. Soc. 55: 52, 1976.

Distribution: Kiripara, Kanyakumari Dist.

Cheilanthes kuhnii Milde in Bot. Zeit. 25: 149, 1867; Ito in Hara Fl. East. Himal. 460, 1966. *Aleuritopteris kuhnii* (Milde) Ching in Bull. Fan. Mem. Inst. Biol. Ser. 2, 1: 272, 1949.

Distribution: Himalayas.

Christella harveyi (Mett.) Holtt. in Kew Bull. 31: 306, 1976. *Aspidium harveyi* Mett. in Kuhn, Linnaea 36: 115, 1869.

Distribution: Indian Botanic Garden, Calcutta (1972) under *Lastrea richardsii* var. *multifida* T. Moore.

Christella hokouensis (Ching) Holtt. in Kew Bull. 31: 327, 1976. *Cyclosorus hokouensis* Ching in Bull. Fan. Mem. Inst. ser. 2, 1: 289, 1949. *Thelypteris hokouensis* (Ching) Reed in Phytologia 17: 283, 1968.

Distribution: South Lushai.

Christella kumaunica Holtt. in Kew Bull. 31: 318, 1976.

Distribution: Kumaun.

Christella lebeufii (Baker) Holtt. in Nayar et Kaur, Comp. Bedd. Handb. Ferns Brit. India with Suppl. 206, 1974 et Kew Bull. 31: 332, 1976. *Polypodium lebeufii* Baker in Ann. Bot. 5: 461, 1891. *Dryopteris lebeufii* (Baker) C. Chr. Ind. Fil. 274, 1905. *Thelypteris lebeufii* (Baker) Panigr. in Notes Roy. Bot. Gard. Edinb. 33: 498, 1975.

Distribution: Assam.

Christella malabariensis (Fée) Holtt. in Kew Bull. 31: 317, 1976. *Nephrodium malabarriense* Fée 10 c Mem. 43, 1865. *Thelypteris malabariensis* (Fée) Panigr. in Notes Roy. Bot. Gard. Edinb. 3: 497, 1975. *Cyclosorus meeboldii* (Resenst.) Ching in Bull. Fan.

Mem. Inst. Biol. Bot. 8: 210, 1938. *Dryopteris meeboldii* Resenst. in Fedde, Report. 12: 247, 1913. *Christella meeboldii* (Resenst.) Holtt. in Nayar et Kaur, Comp. Bedd. Handb. Ferns Brit. India with suppl. 208, 1974.

Distribution: Southern India and North East India.

Christella papilio (Hope) Holtt. in Nayar et Kaur, Comp. Bedd. Handb. Ferns Brit. India with Suppl. 208, 1974 et Kew Bull. 31: 322, 1976. *Nephrodium papilio* Hope in Journ. Bomb. Nat Hist. Soc. 12: 625, t. 12, 1899. *Dryopteris papilio* (Hope) C. Chr. Ind. Fil. 282, 1905. *Cyclosorus papilio* (Hope) Ching in Bull. Fan Mem. Inst. Biol. Bot. 8: 214, 1938. *Thelypteris papilio* (Hope) Iwats. in Mem. Coll. Sci. Univ. Kyoto B 31: 175, 1965.

Distribution: Darjeeling, South India.

Christella semisagittata (Roxb.) Holtt. in Kew Bull. 31: 334, 1976. *Polypodium semisagittatum* Roxb. in Calcutta Journ. Nat. Hist. 4: 491, 1844. *Thelypteris semisagittata* (Roxb.) Morton in Contrib. U.S. Nat. Herb. 38: 360, 1974.

Distribution: Bengal, Assam.

Christella siamensis (Tagawa et Iwats.) Holtt. in Kew Bull. 31: 332, 1976. *Thelypteris siamensis* Tagawa et Iwats. in Acta Phytotax. Geobot. 22: 101, fig. 5, 1967.

Distribution: North-East India.

Christella subelata (Bak.) Holtt. in Kew Bull. 31: 331, 1976. *Nephrodium subelatum* Bak. in Bull. Misc. Inf. Kew 1906: 11, 1906. *Nephrodium multilineatum* var. *assamicum* Bedd. in Journ. Bot. 31: 228, 1893. *Christella assamica* (Bedd.) Noltt. in Nayar et Kaur, Comp. Bedd. Handb. Ferns Brit. India with Suppl. 210, 1974.

Distribution: Assam.

Christella subpubescens (Bl.) Holtt. in Webbia 00: 000, 1976 et Kew Bull. 31: 323, 1976.

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- Aspidium subpubescens* Bl. Enum. Pl. Jav. 149, 1828.
Distribution: North-east India.
- Christella zeylanica** (Fée) Holtt. in Nayar et Kaur, Comp. Bedd. Handb. Ferns Brit. India with Suppl. 208, 1974; et Kew Bull. 31: 334, 1976. *Nephrodium zeylanicum* Fée, 10 e, Mem. 42, 1865. *Thelypteris srilankensis* Panigrahi in Notes Roy. Bot. Gard. Edinb. 33: 499, 1975. *Nephrodium extensum* var. *minor* Bedd. Ferns Brit. India t. 201, 1866.
Distribution: Nicobar.
- Colysis latiloba** (Ching) Ching in Bull. Fan. Mem. Inst. Biol. 4: 330, 1933; Tagawa in Hara Fl. East. Himal. 490, 1966. *Polypodium latifolium* Ching in Bull. Fan. Mem. Inst. Biol. 2: 21, Pl. 7, 1931.
Distribution: Himalaya and Assam.
- Colysis macrophylla** (Bl.) Presl Epim. Bot. 147, 1849; Thothathri et al. in Journ. Bomb. nat. Hist. Soc. 74: 249, 1977. *Grammitis macrophylla* Bl. Enum. Pl. Java 119, 1828.
Distribution: Great Nicobar Islands.
- Colysis pothifolia** (Hamilt. ex D. Don) Ito in Journ. Jap. Bot. 11: 89, 1935. *Hemionitis pothifolia* Hamilt. ex D. Don Prodr. Fl. Nepal 13, 1825.
Distribution: E. India.
- Colysis selligaea** (Mett.) Ching in Sunyats. 5: 261, 1940; Thothathri et al. in Journ. Bomb. nat. Hist. Soc. 74: 251, 1977. *Polypodium selligaea* Mett. Pol. III: 214, 1857.
Distribution: Great Nicobar Islands.
- Coniogramme caudata** (Wall.) Ching in C. Chr. Ind. Fil. Suppl. III. 56, 1934; Ito in Hara Fl. East. Himal. 460, 1966. *Grammitis caudata* Wall. Cat. no. 4, 1828 (nomen nudum). *Coniogramme pubescens* Hieron, in Hedwig. 57, 314, 1916.
Distribution: Darjeeling, Himalayas.
- Coniogramme falcata** (Don) Salom, Nomenel. 139, 1888; Dixit et Das in Journ. Indian Bot. Soc. 56: 255, 1977. *Diplazium falcatum* Don, Prodr. Nepal 13, 1825.
Distribution: Naga Hills, Arunachal Pradesh, Sikkim.
- Coniogramme indica** Fee. Mem. Fam. Foug. 10: 22, 1865.
Distribution: Eastern India.
- Coniogramme intermedia** Hieron. in Hedw. 57: 301, 1916. var. *glabra* Ching, Ic. Fil. Sin. 4: 143, 1935; Ito in Hara Fl. East. Himal. 461, 1966.
Distribution: Himalayas, Darjeeling.
- Coniogramme intermedia** Hieron. in Hedw. 57: 301, 1916 var. *villosa* Ching, Icon. Fil. Sin. 4: t. 143, 1935; Ito in Hara Fl. East. Himal. 461, 1966.
Distribution: North Sikkim, N. India.
- Coniogramme petelotii** Tard.-Blot., Mus. Paris II, 5: 334, 1933; Dixit et Das in Journ. Indian Bot. Soc. 56: 257, 1977. *C. subcordata* Ching in Fan Mem. Inst. Biol. 2: 213, 1913 (non Copel. 1910).
Distribution: Meghalaya.
- Coniogramma subcordata** Copel. Leaflets Phil. Bot. 3: 823, 1910; Hieron, Hedw. 57: 326, 1916; Dixit et Das in Bull. Bot. Surv. India 17: 185, 1975 (1978).
Distribution: Darjeeling, Sikkim.
- Cornopteris biri** Ching ex Bir in Nova Hedw. 7: 502, 1964.
Distribution: Sikkim.
- Crepidomanes bilabiatum** (Nees et Bl.) Copel. Philip. Journ. Sci. 67: 59, 1938; Sledge in Journ. Linn. Soc. Bot. 60: 306, 1968. *Trichomanes bilabiatum* Nees et Bl. Nova Acta 11: 123, 1823.
Distribution: S. India.
- Crepidomanes latealatum** (van den Bosch) Copel. in Philip. Journ. Sci. 67: 60, 1938; Iwats. in Hara Fl. East. Himal. 456, 1966. *Didymoglossum latealatum* van den Bosch. in Ned. Kruid. Arch. 5: 138, 1863; Copel. in Philip. Journ. Sci. 51: 192, 1933.
Distribution: Endemic to Sikkim Himalaya.

Crypsinus chrysotrichus (C. Chr.) Tagawa in Acta Phytotax. Geobot. 14: 193, 1952; Balak. et Chowdh. in Sci. & Cultr. 33: 62, 1967. *Polypodium chrysotrichum* C. Chr. in Contrib. U.S. Nat. Herb. 26: 320, t. 31, 1931.

Distribution: Himalayas.

Crypsinus echinoporous (Tag.) Tagawa in Acta Phytotax. Geobot. 14: 193, 1952; Nishida in Journ. Coll. Arts & Sci. Chiba Univ. 4 (4): 579, 1966. *Phymatodes echinopora* Tagawa in Acta Phytotax. Geobot. 3: 95, 1934.

Distribution: Himalayas.

Crypsinus engleri (Luerss.) Copel. Gen. Fil. 206, 1947; Nishida in Journ. Coll. Arts & Sci. Chiba Univ. 4: 579, 1966. *Polypodium engleri* Luerssen in Engl. Jahrb. 4: 361, 1883.

Distribution: Himalayas.

Crypsinus montanus Sledge in Bull. Brit. Mus. (Nat. Hist.) Bot. 2: 145, 1960.

Distribution: South India.

Crypsinus quasidivaricatus (Hayata) Copel. Gen. Fil. 206, 1947; Tagawa in Hara Fl. East Himal. 492, 1966. *Polypodium divaricatum* Hayata in Bot. Mag. Tokyo 23: 78, 1909; (non Fourn. 1872). *Polypodium quasidivaricatum* Hayata, Mat. Fl. Formos. 446, 1911, based on *Polypodium divaricatum* Hayata. *Phymatodes quasidivaricata* (Hayata) Ching in Contr. Inst. Bot. Nat. Acad. Peiping 2: 83, 1933.

Distribution: Himalayas.

Crypsinus yakushimensis (Mak.) Tagawa in Acta Phytotax. Geobot. 14: 194, 1952; Nishida in Journ. Coll. Arts & Sci. Chiba Univ. 4: 579, 1966. *Polypodium engleri* Luers. var. *yakushimense* Makino in Bot. Mag. Tokyo 23: 248, 1909.

Distribution: Himalayas.

Cyclosorus cylindrothrix (Rosenst.) Ching in Bull. Fan. Mem. Inst. Biol. Bot. 8: 199,

1938; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15 (Ph. I-II): 154, 1964. *Dryopteris cylindrothrix* Rosenst. Fedde Repert. Sp. Nov. 12: 346, 1913.

Distribution: Darjeeling.

Cyclosorus occultus (Hope) Ching in Bull. Fan. Mem. Inst. Biol. Bot. 8: 228, 1938. *Nephrodium occultum* Hope in Journ. Bomb. nat. Hist. Soc. 12: 627, 1899.

Distribution: Tehri Garhwal.

Cyclosorus papilio (Hope) Ching in Bull. Fan. Mem. Inst. Biol. Bot. 8: 214, 1938; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15: 154, 1964. *Nephrodium papilio* Hope in Journ. Bomb. nat. Hist. Soc. 12: 625, t. 12, 1899 and 14: 747, 1903.

Distribution: Darjeeling, North Sikkim.

Cyclosorus polycarpus (Bl.) Holtt. in Fl. Mal. 2: 283, 1954; Thothathri *et al.* in Journ. Bomb. nat. Hist. Soc. 74: 251, 1977. *Aspidium polycarpon* Bl. Enum. 156, 1828.

Distribution: Great Nicobar Islands.

Cystopteris dickieana R. Sim. in Gardn. & Farmers Journ. 308, 1848; Alston et Bonner in Amer. Fern Journ. 41: 76, 1951 et Candollea 15: 212, 1965; Bir et Trikha in Nov. Hedw. 24: 22, 1974. *Cystopteris fragilis* subsp. *eufragilis* var. *baenitzii* (Dorfl.) Warnst. in Aschers. Graebn. Syn. Mit. Eur. Fl. 1: 17, 1896. *Cystopteris baenitzii* Dorfler in Baenitz, Herb. Eur. n. 6510, 1891.

Distribution: Kashmir.

Cystopteris fragilis forma *granulosa* Bir et Trikha in Amer. Fern. Journ. 66: 109, 1976.

Distribution: Himachal Pradesh, Kashmir.

Cystopteris fragilis forma *himalayensis* Bir et Trikha in Amer. Fern. Journ. 66: fig. 3A, 3B, 1976.

Distribution: Gulmarg (Kashmir).

Cystopteris sikkimensis R. C. Ching ex Bir in Nova Hedw. 7:504, 1964; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15 (Pt. I): 136, 1964.

LIST OF INDIAN FERNS

- Distribution:* North Sikkim.
- Dicranopteris linearis** (Burm. f.) Underw. var. *altissima* Holtt. in Reinw. 4: 276, 1957; Panigr. et Dixit in Sen. Mem. Vol. Bot. Soc. Bengal 475, 1969.
- Distribution:* Arunachal, Assam, Shillong, Lakhimpur, Khasia and Jaintia Hills, Louwlyndoh, Madhya Pradesh, Nilgiri, Malabar.
- Dicranopteris linearis** (Burm. f.) Underw. var. *demota* Holtt. in Reinw. 4: 275, 1957; Panigr. et Dixit in Sen. Mem. Vol. Bot. Soc. Bengal 475, 1969.
- Distribution:* Sikkim, Darjeeling (Lloyd Botanic Garden), Kurseong.
- Dicranopteris linearis** (Burm. f.) Underw. var. *latiloba* Holtt. in Reinw. 4: 277, 1957; Panigr. et Dixit in Sen. Mem. Vol. Bot. Soc. Bengal 474, 1969.
- Distribution:* Subansiri, Amji to Palin, Siang, Pang to Minguing, Kameng, Tirap, Shillong, Pongging to Jaru Hills, Diphla Hills, Khasia and Jaintia Hills.
- Dicranopteris linearis** (Burm. f.) Underw. var. *subferruginea* (Hieron.) Nakai in Bull. Nat. Sci. Mus. Tokyo 29: 66, 1950; Panigr. et Dixit in Sen. Mem. Vol. Bot. Soc. Bengal 472, 1969.
- Distribution:* Tirap, Laju Hills, Subansiri, Apatnang Valley, Assam, Khasia and Jaintia Hills, Kumaon, Nilgiri.
- Dicranopteris linearis** (Burm. f.) Underw. var. *sebastiana* Panigr. et Dixit in Bull. Bot. Surv. India 13: 162, 1971 (1973).
- Distribution:* Nilgiri, Madurai.
- Dicranopteris linearis** (Burm. f.) Underw. var. *subpectinata* (Christ) Holtt. in Reinw. 4: 277, 1957; Panigr. et Dixit in Sen. Mem. Vol. Bot. Soc. Bengal 474, 1969. *Gleichenia subpectinata* Christ in Bot. Tidsskr. 25: 111, 1901; *Dicranopteris warburgii* (non *Gleichenia warburgii*) sensu Nakai in Bull. Nat. Sci. Mus. Tokyo 29, 1950; Ito in Hara Fl. East Himal. 456, 1966. *Gleichenia linearis* var. *alternana* sensu Holtt. (non Mett.) Fl. Mal. 2: 70, 1954.
- Distribution:* Andaman Islands, Himalayas.
- Diplazium donianum** (Mett.) Tardieu—Blot, Aspl. du Tonkin 58, t. 5, 1932; C. Chr. Ind. Fil. Suppl. 3: 73, 1934. *Asplenium donianum* Mett. Aspl. 177 no. 198 b, 1858. *Diplazium splendens* Ching in Bull. Fan, Mem. Inst. 2: 205, t. 21, 1931.
- Diplazium polypodioides** Bl. var. *brachylobum* Sledge in Bull. Brit. Mus. Nat. Hist. 2: 307. 1962.
- Distribution:* South India.
- Diplazium simplicivenium** Holtt. in Gard. Bull. Str. Settl. 11: 100-101, 1940; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15 (I-II): 147, 1964. *Athyrium simplicivenium* (Holtt.) Holtt. Fl. Mal. 2: 573, 1954.
- Distribution:* North Sikkim.
- Diplazium squamigerum** (Mett.) Christ in Bull. Soc. Fr. 52, Mem. 1: 51, 1905; Stewart in Bull. Torr. Bot. Club 72: 416, 1945; Journ. Indian Bot. Soc. 30: 139, 1951. *Asplenium squamigerum* Mett. in Ann. Lugd. Bot. 2: 239, 1866; Hope in Journ. Bomb. nat. Hist. Soc. 14: 259, 1902.
- Distribution:* North India, Pahlgam.
- Diplazium sylvaticum** (Bory) Sw. Synops. Fil. 92, 1806; Sledge in Bull. Brit. Mus. Nat. Hist. 2: 301, 1962. *Callipteris sylvatica* Bory in Voy. Mers. Afr. 1: 282, 1804. *Atlantodia pinnata* Blanco in Fl. Filip. ed. 2, 571, 1845. *Athyrium pinnatum* (Blanco) Copel. in Philipp. Journ. Sci. Sect. C. 3, 297, 1908.
- Distribution:* North and South India.
- Diplazium viridissimum** Christ in Not. Syst. 1: 45, 1909; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15 (I-II): 147, 1964. *Athyrium macrosorum* Copel. in Leaflet Philip. Bot. 3: 815, 1910.
- Distribution:* Lebong, Darjeeling.
- Doodia dives** Kunze, Bot. Zeit. 144, 1848; Bedd. Handb. Ferns Brit. India 137, 1883;

Bharg. in Bull. Bot. Surv. India 15: 281, 1973.

Distribution: Nilgiri Dist.

Drymotaenium miyoshianum Makino in Bot. Mag. Tokyo 15: 109, 1901; Dixit et Nair in Journ. Indian Bot. Soc. 54: 256-258, figs. 1-6, 1975.

Distribution: E. India.

Dryopteris acutodentata Ching in Bull. Fan. Mem. Inst. Biol. Bot. 8: 432, 1938. *Nephrodium kingii* Hope [non *Dryopteris kingii* (Bedd.) C. Chr.] in Journ. Bomb. nat. Hist. Soc. 12: 621, 1899.

Distribution: Northern India.

Dryopteris blanfordii (Hope) C. Chr. Index Fil. 254, 1905; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15 (Pt. I-II): 133, 1964, Stewart in Bull. Torr. Bot. Club 12: 405, 1945. *Nephrodium blanfordii* Hope in Journ. Bomb. nat. Hist. Soc. 12: 624, t. 11, 1899.

Distribution: Darjeeling, Kashmir, Simla, Punjab.

Dryopteris costalisora Tagawa in Act. Phytotax. Geobot. 3: 88, 1934; Ito in Hara Fl. East. Himal. 476, 476, 1966.

Distribution: E. Himalaya, Darjeeling.

Dryopteris fructuosa (Christ.) C. Chr. Index Fil. 267, 1905; Mehra et Bir in Res. Bull. (N.S.) Punjab Univ. 15 (Pt. I-II): 132, 1964. *Aspidium fructuosum* Christ in Bull. Soc. Fr. 52: Mem. 1, 38, 1905.

Distribution: Lachen Valley, North Sikkim.

Dryopteris gamblei (Hope) C. Chr. Ind. 267, 1905. *Nephrodium gamblei* Hope in Journ. Bomb. nat. Hist. Soc. 12 (3): 533, 1899.

Distribution: Sikkim, Darjeeling, Assam, Shillong.

Dryopteris harae Ito in Hara Fl. East. Himal. 476, 1966.

Distribution: Sikkim Himalaya (endemic).

Dryopteris hasseltii (Bl.) C. Chr. Ind. Fil. 269, 1905; Ito in Hara Fl. East. Himal. 477, 1966.

Polypodium hasseltii Bl. Fl. Jav. Fil. 195, t. 92, 1829. *Polystichopsis hasseltii* (Bl.) Holtt. Fl. Mal. 2: 487, 1954.

Distribution: E. Himalaya (Nepal to Assam).

Dryopteris hexagonoptera (Mich.) C. Chr. Ind. Fil. 270, 1905; Stewart in Bull. Torr. Bot. Club 72: 411, 1945. *Polypodium hexagonopterum* Michx. Fl. Bor. Am. 2: 271, 1803. *Phegopteris hexagonoptera* Fée, Gen. Fil. 243, 1850-52.

Distribution: Zanscar (a province of Ladak), North of Simla.

Dryopteris hypophlebia Hayata in Icon. Pl. Formos. 416, 1911; Ito in Hara, Fl. East. Himal. 477, 1966.

Distribution: Himalayas.

Dryopteris kawakamii Hayata, Mater. Fl. Formos. 416, 1911; Ito in Hara. Fl. East. Himal. 477, 1966.

Distribution: E. Himalaya.

Dryopteris laterepens (Trotter) C. Chr. Index Fil. 274, 1905; Stewart in Bull. Torr. Bot. Club 72: 409, 1945. *Polypodium laterepens* Trotter ex Hope in Journ. Bomb. nat. Hist. Soc. 12: 628, t. 14, 1899.

Distribution: North India.

Dryopteris ramosa (Hope) C. Chr. Ind. 287, 1905; Stewart in Bull. Torr. Bot. Cub. 72: 406, 1945; Journ. Indian Bot. Soc. 30: 138, 1951. *Nephrodium ramosum* Hope in Journ. Bot. 34: 126, 1896; Journ. Bomb. nat. Hist. Soc. 14: 740, 1903.

Distribution: Kashmir, Punjab.

Dryopteris reflexosquamata Hayata in Icon. Pl. Formos. 4: 176, f. 114, 1914; Ito in Hara Fl. East. Himal. 478, 1966.

Distribution: Darjeeling, Himalayas.

Dryopteris repens (Hope) C. Chr. Ind. 288, 1905; Stewart in Bull. Torr. Bot. Club. 72: 408, 1945. *Nephrodium repens* Hope in Journ. Bomb. nat. Hist. Soc. 12: 535, 1899. *Nephrodium prolixum* Baker in Syn. Fil. 268, 1867.

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- Distribution:* North India—Nepal, Sikkim, Bhutan, Shillong.
- Dryopteris squamiseta** (Hook.) O. Kuntze, Rev. Gen. Pl. 2: 813, 1891; Ito in Hara Fl. East. Himal. 479, 1966. *Nephrium squamisetum* Hook. Sp. Fil. 4: 140, t. 263, 1862. *Distribution:* Himalayas.
- Dryopteris yunnanensis** (Christ) Copel. Gen. Fil. 122, 1947; Ito in Hara Fl. East. Himal. 479, 1966. *Aspidium yunnanense* Christ in Bull. Herb. Boiss. 6: 965, 1898. *Distribution:* Himalayas.
- Dryopteris subimpressa** Loyal in Nova Hedw. 16: 467, 1968. *Distribution:* Eastern Himalayas (Darjeeling).
- Dryopteris submarginata** Loyal in Nova Hedw. 16: 465-466, 1968. *Distribution:* Eastern Himalaya (North Sikkim).
- Egenolfia keralensis** Nayar et Kaur in Bull. Nat. Bot. Gard. 94: 4, 1964. *Distribution:* Kanthalur; Munnar (Kerala); Mercara, Coorg.
- Elaphoglossum beddomei** Sledge in Bull. Brit. Mus. Nat. Hist. 4: 88, 1967. *Distribution:* Nilgiri, Anamalay and Palghat Hills.
- Elaphoglossum marginatum** (Wall. ex Fée) Moore, Ind. Fil. 8: 11, 1857, 361. 1862; Sledge in Bull. Brit. Mus. Nat. Hist. Bot. 4: 89, 1967. *Acrostichum marginatum* Wall. ex Fée in Acrost. 31, 1845. *Distribution:* South India.
- Elaphoglossum nilgiricum** Krajina ex Sledge in Bull. Brit. Mus. Nat. Hist. 4: 94, 1967. *Distribution:* Endemic to Nilgiri Hills.
- Elaphoglossum stigmatolepis** (Fée) T. Moore, Ind. Fil. 16: 15, 1857; 368, 1862; Christ in Neue Denkschr. Schw. Ges. Naturw. 36: 52, 1899; Sledge in Bull. Brit. Mus. Nat. Hist. 4: 86, 1967. *Elaphoglossum ballardianum* Biswas in Bull. Brit. Mus. Nat. Hist. 4: 86, 1967. *Elaphoglossum ballardianum* Biswas in Bull. Misc. Inf. Kew 1939: 239, t. 1, f. 1, 1939. *Distribution:* Nilgiri and Pulney Hills.
- Elaphoglossum yunnanense** (Bak.) C. Chr. Contr. U.S. Nation. Herb. 26: 327, 1931; Ito, Tagawa et Iwats. in Hara Fl. East. Himal. 479, 1966. *Acrostichum yunnanense* Bak. in Kew Bull. 1898: 233, 1898. *Distribution:* Himalayas.
- Gleichenia blotiana** C. Chr. Bull. Mus. Hist. Nat. Paris II, 6: 103, 1934; Panigrahi and Dixit in Bull. Bot. Surv. India 10: 339, 1968. *Hicriopteris blotiana* Ching in Syntatsenia 5: 279, 1940. *Diplopterygium blotianum* Nakai in Bull. Nat. Sci. Mus. Tokyo 29: 49, 1950. *Distribution:* Siang, Eyo to Tumbering; Tirap, Kheti-Inchha, Assam.
- Gleichenia laevissima** Christ in Bull. Ac. Inst. Geogr. Bot. III, 11: 268, 1902; Panigrahi & Dixit in Bull. Bot. Surv. India 10: 337, 1968. *Hicriopteris laevissima* Ching in Syntatsenia 5: 280, 1940. *Diplopterygium laevissima* Nakai in Bull. Nat. Sci. Mus. Tokyo 29: 52, 1950. *Distribution:* Forests of the Eastern India.
- Gleichenia volubilis** Jung. Reis. Java 1: 452, 1845; Panigarhi et Dixit in Bull. Bot. Surv. India 10: 339, 1968. *Gleichenia glauca* var. *arachnoides* C. Chr. Index Fil. 320, 1095. *Hicriopteris volubilis* (Jungh.) Ching in Syntatsenia 5: 280, 1940. *Diploterygium volabile* (Jungh.) Nakai in Bull. Nat. Sci. Mus. Tokyo 29: 55, 1950. *Distribution:* Assam, Khasi and Jaintia Hills, Mawphlong, Shillong, Bishnupur, Cherrapunji, Darjeeling.
- Gonocormus diffusus** (Bl.) van den Bosch, Hymen. Jav. 9, 1859; Iwats. in Hara Fl. East. Himal. 456, 1966. *Trichomanes diffusum* Bl. Enum. Pl. Jav. 225, 1828. *Distribution:* Himalayas.

Holcosorus bisulcata (Hook.) Ching in *Syn. vatsenia* 5: 265, 1940; Dixit et Nair in Proc. Ind. Acad. Sci. B. 86: 385-387, 1977. *Grammitis bisulcata* Hook. Ic. Pl. t. 998, 1854.
Distribution: E. India.

Humata heterophylla (Sm.) Desv. Prodr. 323, 1825; Thothathri et al. in Journ. Bomb. nat. Hist. Soc. 74: 251, 1977. *Davallia heterophylla* Sm. Mem. Ac. Turin 5: 415, 1793.
Distribution: Great Nicobar Island.

Idiopteris hookeriana Walker in Kew Bull. 3: 429, 1957.

Distribution: Malabar.

Lepisorus amaurolepidus (Sledge) Bir et Trikha in Bir et Vasudeva, Journ. Bomb. nat. Hist. Soc. 68: 192, 1971; Bir et Trikha in Amer. Fern. Journ. 64 (2): 60, 1974; Bull. Bot. Surv. India 11: 266, 1969. *Pleopeltis amaurolepida* Sledge in Bull. Brit. Mus. (Nat. Hist.) 2: 136, 1960. *Polypodium gladiatum* Wall. Cat. 279, 1828 (nom. nudum; non *Polypodium gladiatum* Kze. 1834).

Distribution: Himalayas, Central India, South India.

Lepisorus amaurolepidus (Sledge) Bir et Trikha var. *longifolius* Bir et Trikha in Amer. Fern. Journ. 64: 63, 1974.

Distribution: Nainital, Ranikhet.

Lepisorus angustus Ching in Bull. Fan. Mem. Inst. Biol. 4: 86, 1933; Bir et Trikha in Bull. Bot. Surv. India 11: 268, 1969. *Polypodium lineare* var. *thunbergianum* f. *caudatoattenuata* Takeda in Notes Roy. Bot. Gard. Edinb. 8: 269, 1915. *Polypodium caudato-attenuatum* (Takeda) C. Chr. Ind. Fil. Suppl. III. 146, 1934. *Pleopeltis caudato-attenuata* (Takeda) Panigr. & Patn. in Curr. Sci. 34: 127, 1965. *Lepisorus thunbergianus* (Kaulf.) Ching var. *angustus* (Ching) Kurata in Sci. Report Yokozuka City Mus. No. 11. 39, 1965.

Distribution: Eastern Himalaya.

Lepisorus contortus (Christ) Ching in Bull. Fan. Mem. Inst. Biol. Bot. 4: 90, 1933; Bir et Trikha in Bull. Bot. Surv. India 11: 271, 1969. *Polypodium contortum* Christ in Bot. Gaz. 51: 347, 1911. *Pleopeltis contorta* (Christ) Alston et Bonner in Candollea 15: 209, 1956.

Lepisorus aff. excavatus (Bory) Ching in Mehra et Bir in Res. Bull. Panjab Univ. (N.S.) 15: 168, 1964.

Distribution: Singhik, North Sikkim.

Lepisorus excavatus (Bory) Ching var. *himalayensis* Bir et Trikha in Amer. Fern. Journ. 64: 58, 1974.

Distribution: Nainital.

Lepisorus excavatus (Bory) Ching var. *mortonianus* Bir et Trikha in Amer. Fern. Journ. 64: 56, 1974.

Distribution: Nainital.

Lepisorus excavatus (Bory) Ching var. *scolopendrium* (Ham.) Ching in Bull. Fan. Mem. Inst. Biol. 4: 69, 1933; Kitamura in Fauna Flora Nep. Himal. 1: 80, 1952-53.

Distribution: Himalayas.

Lepisorus kashyapii (Mehra) Mehra et Bir in Res. Bull. Panjab Univ. (N.S.) 13: 23, 1963; Bir et Trikha in Bull. Bot. Surv. India 11: 271, 1969. *Polypodium kashyapii* Mehra Ferns of Mussoorie, Panjab Univ. Bot. Pub. 7: 24, Fig. 5, 1939. *Pleopeltis kashyapii* (Mehra) Alston et Bonner in Candollea 15: 208, 1956.

Distribution: Himalayas.

Lepisorus kuchenensis (Wu) Ching in Bull. Fan. Mem. Inst. Biol. 4: 69, 1933; Mehra et Bir in Res. Bull. Panjab Univ. (N.S.) 15: 168, 1964; Bir et Trikha in Bull. Bot. Surv. India 11: 273, 1969. *Polypodium kuchenensis* Wu in Wu et al. Polypod. Yao-shan. 276, t. 129, 1932.

Distribution: Nepal, Sikkim, Darjeeling.

Lepisorus oligolepidus (Baker) Ching in Bull. Fan. Mem. Inst. Biol. 4: 80, 1933; Bir et

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Trikha in Amer. Fern. Journ. 64: 50, 1974.
Polypodium oligolepidum Baker in Gardn. Chron. n.s. 14: 494, 1880.

Distribution: Uttar Pradesh.

Lepisorus oosphaerus (C. Chr.) Ching in Bull. Fan. Mem. Inst. Biol. 4: 70, 1933; Bir et Trikha in Amer. Fern Journ. 64: 58, 1974.
Polypodium oosphaerum C. Chr. Contr. U.S. Nat. Herb. 26: 334, t. 29, 1931. *Pleopeltis oosphaera* (C. Chr.) Panigr. et Patn. in Proc. Nat. Acad. Sci. India B. 34: 482, 1964.

Distribution: Lushai Hills.

Lepisorus pseudonudus Ching in Bull. Fan. Mem. Inst. Biol. 4: 83, 1933; Bir et Trikha in Bull. Bot. Surv. India 11: 268, 1969.
Pleopeltis pseudonuda (Ching) Panigr. & Patn. in Curr. Sci. 34: 127, 1965.

Distribution: Assam, Khasi Hills, Tirap and Mameng.

Lepisorus sordidus (C. Chr.) Ching in Bull. Fan. Mem. Inst. Biol. 4: 78, 1933; Bir et Trikha in Amer. Fern Journ. 64: 58, 1974.
Polypodium sordidum C. Chr. U.S. Nat. Herb. 26: 320, 1931. *Pleopeltis sordida* (C. Chr.) Panigr. et Patn. in Curr. Sci. 34: 127, 1965.

Distribution: Eastern Himalaya.

Lepisorus subconfluence Ching in Bull. Fan. Mem. Inst. Biol. 4: 83, 1933; Bir et Trikha in Amer. Fern. Journ. 64: 60, 1974. *Pleopeltis subconfluens* (Ching) Panigr. et Patn. in Curr. Sci. 34: 127, 1965.

Distribution: Eastern Himalaya.

Lepisorus sublinearis (Baker) Ching in Bull. Fan. Mem. Inst. Biol. 4: 78, 1933; Bir et Trikha in Amer. Fern Journ. 64: 52, 1974.
Polypodium sublineare Baker ex Takeda in Notes Roy. Bot. Gard. Edinb. 8: 276, 1915.
Distribution: Assam, Manipur, Kohima.

Lepisorus suboligolepidus Ching in Bull. Fan. Mem. Inst. Biol. 4: 77, 1933; Bir et Trikha in Amer. Fern. Journ. 64: 52, 1974.
Distribution: Kashmir, Assam, Sikkim.

Lepisorus thunbergianus (Kaulf.) Ching in Bull. Fan. Mem. Inst. Biol. 4: 88, 1933; Bir et Shukla in Nova Hedw. 21: 200, 1971. *Pleopeltis thunbergiana* Kaulf. Wesen d. Ferrnkrt 13, 1837. *Polypodium lineare* Thunb. Fl. Jap. 335, 1784 (non *Polypodium lineare* auct.)

Distribution: Huttoo Peak.

Lepisorus ussuriensis (Regel & Maack) Ching in Bull. Fan. Mem. Inst. Biol. 4: 91, 1933; Bir & Trikha in Bull. Bot. Surv. India 11: 268, 1969. *Pleopeltis ussuriensis* Regel et Maack in Mem. Acad. Sci. Petersb. VII. 4: 40, 175, 1861. *Polypodium lineare* var. *ussuriense* C. Chr. Index Fil. 572. 1906.
Distribution: Himalayas.

Lindsaea himalaica Kramer in Gard. Bull. Singp. 26: 43, 1972. *Lindsaea cultrata* (Willd.) Sw. var. *assamica* Hook. Sp. Fil. 1: 204, 1846.

Distribution: Assam, Arunachal Pradesh, Manipur.

Lindsaea javanensis Blume, En. Pl. Jav. 219, 1972; Kramer in Gard. Bull. Sing. 26: 25, 1972. *Lindsaea flabellulata* Dryander var. *gigantea* Hook. Sp. Fil. 1: 211, t. 63 c, 1846.
Distribution: Assam.

Lindsaea lucida Blume En. Pl. Jav. 216, 1828; Holttum, Fl. Mal. 2: 328, 1954; Kramer in Blumea 15: 567, 1968 et Gard. Bull. Sing. 26: 44, 1972.

Distribution: Assam, Andaman, Bengal, Tamil Nadu.

Lindsaea odorata Roxb. var. *darjeelingensis* Sen et Sen in Amer. Fern Journ. 61: 14, 1971.

Distribution: Darjeeling.

Lindsaea orbiculata (Lamk.) Mett. et Kuhn var. *commixta* (Tagawa) Kramer Fl. Mal. II, 1, 3: 207, 1971 et Gard. Bull. Sing. 26: 22, 1972. *Lindsaea commixta* Tagawa in Acta. Phytotax. Geobot. 6: 37, f. 3 H-J, 1937.

Distribution: Assam, Uttar Pradesh, Kerala.
Loxogramme grammoides (Bak.) C. Chr.

Ind. Fil. Suppl. 2: 21, 1917; Tagawa in Hara Fl. East. Himal. 494, 1966. *Gymnogramme grammoides* Bak. in Journ. Bot. 27: 178, 1889.

Distribution: Darjeeling.

Loxogramme salicifolia (Makino) Makino in Bot. Mag. Tokyo 19: 138, 1905; Tagawa in Hara in Fl. East. Himal. 495, 1966. *Gymnogramme salicifolia* Makino in Phan. Pter. Jap. Icon. III 1: t. 34, 1899.

Distribution: Himalayas & Assam.

Lunathyrium acutum Ching in Acta Phytotax. Sin. 9: 73, 1964.

Distribution: Eastern India.

Lunathyrium sikkimense Ching in Acta Phytotax. Sin. 9: 72, 1964.

Distribution: Darjeeling.

Marsilea aegyptiaca Willd. Sp. Pl. 5: 540, 1810; Gupta, Marsilea, Bot. Mon. 26, 1962.

Distribution: Orissa, Rajasthan.

Marsilea brachycarpa A. Br. Montsber. Ak. Berl. 1863: 420, 1864; Gupta, Marsilea, Bot. Mon. 16, 1962.

Distribution: Bangalore, Kankanhalli.

Marsilea brachypus A. Br. Montsber. Ak. Berl. 1863: 421, 1864, Gupta, Marsilea, Bot. Mon. 18, 1962.

Distribution: Nilgiris, Amritsar, Bank of Sutlej.

Marsilea condensata Baker in Journ. Bot. 1886: 281, 1886; Gupta, Marsilea, Bot. Mon. 28, 1962.

Distribution: Rajasthan.

Marsilea gracilenta A. Br. Montsber. Ak. Berl. 1863: 421, 1864; Gupta, Marsilea, Bot. Mon. 19, 1962.

Distribution: Konkan, Kemnangudi.

Marsilea coromandelica Burm. f. Fl. Ind. t. 62. f. 3, 1768; Gupta, Marsilea, Bot. Mon. 20, 1962.

Distribution: Coromandel Coast; Tranquebar.

Marsilea maheshwarii Gopal in Amer. Fern Journ. 58: 70, 1968.

Distribution: Pondicherry.

Marsilea major (Haines) Chowdhury, Res. Living Pteridophytes, New Delhi, 49, 1971; Pter. Fl. Upper Gang. Pl. 24, 1973. *Marsilea minuta* Linn. var. *major* Haines, Botany of Bihar and Orissa (Rep. Ed.) 3: 1272, 1961. **Distribution:** Bihar.

Marsilea minuta Linn. Mant. 308, 1771; Gupta, Marsilea, Bot. Mon. 23, 1962. *Marsilea dentata* Roxb. (nomen).

Distribution: Throughout India.

Marsilea minuta Linn. var. *indica* Gupta, Marsilea, Bot. Mon. 25, 1962.

Distribution: Alwar, Bharatpur.

Marsilea poonensis Kolhatkar in Kew Bull. 1957: 293, f. 1. 1957.

Distribution: Poona.

Marsilea quadrifolia Linn. Sp. Pl. 1099, 1753; Gupta, Marsilea, Bot. Mon. 22, 1962.

Distribution: Kashmir.

Marsilea rajasthanensis Gupta, Marsilea, Bot. Mon. 29, 1962.

Distribution: Rajasthan (Ajmere, Jaipur).

Marsilea rajasthanensis Gupta var. *ballardii* (Gupta) Gupta, Marsilea, Bot. Mon. 30, 1962. *Marsilea ballardii* Gupta in Journ. Bomb. nat. Hist. Soc. 53: 289, 1955.

Distribution: Rajasthan (Ajmer, Udaipur, Kota).

Meringium holochilum (v.d. Bosch.) Copel. in Philip. Journ. Sc. 67: 42, 1938; Panigr. in Bull. Bot. Surv. India 2: 311, 1960. *Didymoglossum holochilum* v.d. Bosch. Pl. Jungh. 1: 561, 1856. *Hymenophyllum holochilum* (v.d. Bosch.) C. Chr. Ind. Fil. 362, 1905.

Distribution: Eastern India.

Meringium penangianum (Matt. et C. Chr. ex Christ.) Copel. in Philip. Journ. Sc. 67:

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41, 1938; Panigr. in Bull. Bot. Surv. India 2: 311, 1960. *Hymenophyllum penangianum* Matt. et C. Chr. ex Christ in Journ. Linn. Soc. 39: 214, 1919.

Distribution: Eastern India.

Microlepia haflangensis Nayar et Kaur in Bull. Nat. Bot. Gard. 94: 8, 1964.

Distribution: Haflong, Assam.

Microlepia hallbergii (d' Almeida) C. Chr. Ind. Suppl. III. 127, 1934. *Davallia hallbergii* d'Almeida in Journ. Indian Bot. Soc. 5: 19, 1926-27.

Distribution: Madura District.

Microlepia khasiana Presl, Epim. 95, 1849; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15 (Pt.-I-II): 117, 1964. *Davallia khasiana* (Presl) Hook. Spec. Fil. 1: 173, t. 47A, 57A, 1856.

Distribution: Lebong (Darjeeling).

This is often treated as conspecific with *Microlepia strigosa* (Thb.) Presl. But the two are different.

Microlepia speluncae (Linn.) Moore var. *pubescens* (Hook.) Sledge in Kew Bull. 525, 1956; Panigr. in Bull. Bot. Surv. India 3: 311, 1960.

Distribution: E. India.

Microlepia todayensis Christ in Philip. Journ. Sci. 3: 272, 1908; Intro in Hara, Fl. East Himal. 463, 1966.

Distribution: E. Himalaya.

Microlepia wilfordii Moore, Ind. 299, 1861. *Davallia wilfordii* Baker, Syn. Fil. 98, 1867; Hope in Journ. Bomb. nat. Hist. Soc. 13: 33, 1900. *Davallia rhomboidea* Hook. 2nd Cent., t. 48, 1860 (non Wall.).

Distribution: Kashmir.

Monochosorum henryi Christ in Bull. Herb. Boiss. 6: 869, 1898. Ito in Hara Fl. East Himal. 463, 1966.

Distribution: Himalayas.

Nephrodium pandum Hope in Journ. Bomb. nat. Hist. Soc. 12 (3): 623, 1899.

Distribution: N. E. India, Sikkim.

Nephrodium biserrata (Sw.) Schott. Gen. Fil. t. 3, 1834; Thothathri et al. Journ. Bomb. nat. Hist. Soc. 74: 251, 1977. *Aspidium biserratum* Sw. Schrad. Journ. Bot. 1800: 32, 1801.

Distribution: Great Nicobar Islands.

Nephrolepis delicatula (Decne.) Pic.-Serm. in Webbia 23: 181, 1968; Pic.-Serm, Estratto Dagli Annali Del Museo Civico Di Storia Naturale Di Genova, Vol. LXXVII—30 Luglio 275, 1968. *Nephrodium delicatulum* Decne. In Jacquem. Voy. Ind. Bot. 4: 178, t. 179, 1844.

Distribution: Assam, Western and Southern India.

Nephrolepis paucifrondosa d' Almeida in Journ. Indian Bot. Soc. 5: 51, t. 1-4. 1926

Distribution: South India.

Nephrolepis undulata (Afz. ex Sw.) J. Smith in Curtis Bot. Mag. 72: 35 bis. 1846; Pic.-Serm. Estrato Dagli Annali Del Museo Civico Di Storia Naturale Di Genova, Vol. LXXVII-30 Luglio 273, 1968. *Asplidium undulaum* Afz. ex Swartz. Schrad Journ. Bot. 1800: 32, 1801.

Distribution: South India.

Onychium fragile Verma et Khullar in Nova Hedw. 9: 85, 1965.

Distribution: Himalayas.

Onychium ipii Ching in Lingnan Sc. Journ. 15: 282, 1936; et Ic. Fil. Sinic. 4, t. 164, 1937; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15 (Pt. I-II): 108, 1964.

Distribution: Chungthang (North Sikkim).

Ophioglossum gramineum Willd. var. *majus* (v.a.v.R.) Wieff. in Blumea 12: 324, f. 2b, photo 3, 1964, Panigr. et Dixit in Proc. Nat. Inst. Sci. 35: 251, f. 42, 94-97, 1969. *Ophioglossum inconspicuum* (Rac.) v.A.V.R. var. *majus* v.A.v.R. in Bull. Dep. Agr. Ind. Neerl. 21: 9, 1908. *Ophioglossum gramineum* Christ. Nova Guinea 13, 8: 164, 1909.

Distribution: West Bengal, Tripura.

Ophioglossum nudicaule Linn. f. var. **macrorrhizum** (Kunze) Clausen, Mem. Torr. Bot. Club 19: 150, 1938; Panigr. et Dixit in Proc. Nat. Inst. Sci. 35: 254, 1969. *Ophioglossum macrorrhizum* Kunze in Die Farrnkrauter 1: 57, t. 29, f. 1, 1840.

Distribution: Madhya Pradesh, Gujarat, W. Bengal, Upper Gangetic Plain.

Ophioglossum petiolatum Hook. Exot. Fl. 1, t. 56, 1823; Panigr. et Dixit in Proc. Nat. Inst. Sci. 35: 260, 1969.

Distribution: Uttar Pradesh, Madhya Pradesh.

Ophioglossum polyphyllum A. Braun apud Seubert, Fl. Azor. 17: 1844; Pichi-Serm. in Webbia 9: 632, 1954; Panigr. et Dixit in Proc. Nat. Inst. Sci. 35: 255, 1969; Safui et Ghosh in Bull. Bot. Surv. India 17: 160, 1975 (1978). *Ophioglossum cuspidatum* Milde in Bot. Zeit 22: 107, 1864. *Ophioglossum aitchisonii* (Clarke) d'Almeida in Journ. Indian Bot. Soc. 3: 63, f. 12-13, 1922; Clausen in Mem. Torr. Bot. Club 19: 138, 1938. Mahabale in Bull. Bot. Surv. India 4: 71, 1962. *Ophioglossum lusitanicum* C.W. Hope (non Linn.) in Journ. Bomb. nat. Hist. Soc. 15: 106, 1903. *Ophioglossum regulare* (Schlecht) C. Chr. Index Fil. 472, 1906. *Ophioglossum capense* Sw. sensu Chakravarty in Bull. Bot. Soc. Bengal 5: 5, 1951. *Distribution:* Uttar Pradesh (N. W. Himalayas); Cherat, Madhya Pradesh; Bastar; Sikkim.

Ophioglossum reticulatum Linn. forma **complicatum** (Miq.) Wieff. in Blumea 12: 330, f. 1a, 1964; Panigr. et Dixit in Proc. Nat. Inst. Sci. India 35: 260, 1969. *Ophioglossum moluccanum* f. *complicatum* Miq. Ann. Mus. Bot. Lugd. Bat. 4: 290, 1868.

Distribution: Assam, Arunachal Pradesh, Sikkim.

Ophioglossum reticulatum Linn. forma **dilatatum** (Miq.) Wieff. in Blumea 12: 329 f. IC, 1964; Panigr. et Dixit in Proc. Nat. Inst. Sci. 35: 259, f. 55, 84, 1969. *Ophioglossum moluccanum* Schlecht. forma *dilatatum* Miq. in Ann. Mus. Bot. Lugd. Bat. 4: 92, 1868. *Distribution:* Uttar Pradesh—Mussorie.

Ophioglossum thermale Kumarov var. **nipponicum** (Miyabe et Kudo) Nishida in Tagawa in Journ. Jap. Bot. 33: 202, 1958. *Ophioglossum nipponicum* Miyabe et Kudo in Tran. Sapporo Nat. Hist. Soc. 6: 122, 1916. *Ophioglossum japonicum* Prantl in Ber. Deut. Bot. Ges. 1: 353, 1883 (non Thunb.); Mahabale in Bull. Bot. Surv. India 4: 71, 1962. *Ophioglossum angustatum* Clausen in Mem. Torr. Bot. Club 19: 129, 1938.

Distribution: Clausen, Nishida and Mahabale state that this taxon is present in India.

Osmunda cinnamomea Linn. Sp. Pl. 2: 1066, 1753; Panigr. in Bull. Bot. Surv. India 2: 310, 1960; Panigr. et Dixit in Journ. Indian Bot. Soc. 48: 99, 1969.

Distribution: Arunachal Pradesh, Kameng Dist.

Osmunda japonica Thunb. in Nov. Act. Reg. Soc. Sci. Upsal. 2: 209, 1780; Fl. Jap. 330, 1784; Panigr. et Dixit in Journ. Ind. Bot. Soc. 48: 97, 1969; Ito in Hara Fl. East. Himal. 455, 1966.

Distribution: Uttar Pradesh, Assam, Bhutan, Darjeeling, Sikkim.

Osmunda claytoniana Linn. var. **vestita** (Wall.) Milde, Honogr. Gen. Osmund. 102, 1868. Ito in Hara Fl. East. Himal. 455, 1966. *Osmunda monticola* Wall. B. *vestita* Wall. Cat. no. 52, 1828 (nomen.) *Osmundastrum claytonianum* (Linn.) Tagawa var. *vestitum* (Wall.) Tagawa in Journ. Jap. Bot. 17: 698, 1941.

Distribution: E. Himalaya.

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- Phymatodes banerjiana** Pal et Pal in Amer. Fern. Journ. 53: 103-104, 1963; Bir et Devi in Bull. Bot. Surv. India 10: 214, 1968.
Distribution: Under cultivation in Bose Research Institute, Calcutta; Science College, Calcutta University, and Indian Botanic Garden, Sibpur, Howrah.
- Pityrogramma austroamericana** Domin in Spisy Prirod. Fak. Karlovy Univ. 88: 7, 1928 et in Bull. Misc. Inf. Kew 1929: 221, 1929; Panigr. in Kew Bull. 30: 663, 1976.
Distribution: South India.
- Pityrogramma calomelanos** (Linn.) Link, in Handb. Gewachse 3: 29, 1833; Panigr. in Bull. Bot. Surv. India 2: 312, 1960; (excl. Syn. et Ref. Bedd. 104) et in Kew Bull. 30: 660, 1976. Nair et Ghosh in Journ. Indian Bot. Soc. 54: 104, 1975. *Acrostichum calomelanos* Linn. Sp. Pl. 2: 1072, 1753.
Distribution: Throughout India except the drier parts.
- Pityrogramma chrysophylla** (Sw.) Link, Handb. Gewachse 3: 19, 1833; Nair et Ghosh in Journ. Indian Bot. Soc. 54: 106, 1975; Panigr. in Kew Bull. 30: 664, 1976. *Acrostichum chrysophyllum* Sw. in Schrad. Journ. Bot. 1800: 14, 1802.
Distribution: South India.
- Pneumatopteris truncata** (Poir.) Holtt. var. *loyalii* Holtt. in Blumea 21: 314, 1973.
Distribution: Darjeeling.
- Polypodium amoenum** Wall. var. *xerophyticum* Mehra et Bir in Res. Bull. (N.S.) Punjab Univ. 15: 166, 1964.
Distribution: Lachen Valley in Sikkim State, E. Himalaya.
- Polypodium late-repens** Hope in Journ. Bomb. nat. Hist. Soc. 12: 628, t. 14, 1899.
Distribution: Himalayas, Sikkim.
- Polypodium manniense** Christ in Bull. Herb. Boiss. 6: 870, 1898; Ching. IC. Fil. Sinicarum 2, t. 94, 1934; Bir et al. in New Bot. 1: 150, 1974.
- Distribution:* Eastern India, Himalayas.
- Polypodium niponicum** Mett. in Ann. Lugd. Bat. 2: 222, 1866; Ching. IC. Fil. Sinicarum 2, t. 98, 1934; Bir et al. in New Bot. 1: 148, 1974.
Distribution: Eastern India.
- Polystichum duthieei** (Hope) C. Chr. Ind. Fil. 72, 1905; 581, 1906. *Aspidium duthieei* Hope in Journ. Bomb. nat. Hist. Soc. 12: 532, 1899.
Distribution: Himalayas.
- Polystichum garhwalicum** Nair et Nag in Journ. Jap. Bot. 51: 138, t. 1, 1976.
Distribution: Garhwal, Bashahr.
- Polystichum heteropaleaceum** Nair et Nag in Journ. Bomb. nat. Hist. Soc. 75: 153, 1977.
Distribution: Shillong.
- Polystichum levingei** Nair in Bull. Bot. Surv. India 11: 192, 1969.
Distribution: Darjeeling.
- Polystichum longipinnulum** Nair in Amer. Fern. Journ. 64: 15, 1974.
Distribution: Darjeeling, Khasia.
- Polystichum neolobatum** Nakai in Bot. Mag. Tokyo 39: 118, 1925; Tagawa in Hara, Fl. East. Himal. 480, 1966.
Distribution: Himalayas.
- Polystichum setiferum** (Forsk.) Moore ex Woynar Mitt. Naturw. Ver. Steierm. 49: 1811, 1913; Nair in Journ. Indian Bot. Soc. 51: 93, 1972.
Distribution: North and South India.
- Polystichum setiferum** var. *crenatum* Nair in Amer. Fern. Journ. 64: 15, 1974.
Distribution: Punjab.
- Polystichum stenophyllum** Christ in Bull. Soc. Bot. France 52: Mem. 1, 27, 1905; Tagawa in Hara Fl. East. Himal. 481, 1966.
Distribution: Himalayas.
- Polystichum tsus-simense** (Hook.) Sm. Journ. Hist. Fil. 219, 1875; Stewart in Bull. Torr. Bot. Club 72: 412, 1945. *Aspidium tsus-simense* Hook. Sp. Fil. 4: 16. Pl. 220. 1862.

Aspidium luctuosum Kunze in Linnaea 10: 548, 1835-6; Hope in Journ. Bomb. nat. Hist. Soc. 14: 474, 1902.

Distribution: Temperate Himalaya.

Pronephrium lakhimpurens (Rosenst.) Holtt. in Blumea 20: 1972. *Dryopteris lakhimpurens* Rosenst. Meded. Rijkshorb. 31: 7, 1917.

Distribution: N.E. India.

Pronephrium thwaitesii (Hook.) Holtt. in Blumea 20: 122, 1972. *Meniscium thwaitesii* Hook. Fil. Exot. sub t. 83, 1859.

Distribution: S. India.

Pseudophegopteris hirtirachis (C. Chr.) Holtum in Blumea 17: 22, 1969. *Dryopteris hirtirachis* C. Chr. in Leveille, Cat. Pl. Yunan 104, 1916. *Thelypteris brunnea* var. *hirtirachis* Ching in Bull. Fan. Mem. Inst. Biol. Bot 6: 271, 1916.

Distribution: Darjeeling, North East India.

Pseudophegopteris rectangularis (Zoll.) Holtum in Blumea 17: 19, 1969. *Polypodium rectangularare* Zoll. Syst. Verz. 37, 48, 1854. *Polypodium distans* Don var. *minor* Clarke in Trans. Linn. Soc. 2, Bot. 1: 545, t. 79, f. 1, 1880.

Distribution: North East India, Sikkim.

Pteridium capense (Thunb.) Krasser var. *densum* (Wall.) in Bull. Nat. Sci. Mus. No. 27: 5, 1949; Kitamura, Fauna Fl. Nep. Himal. 1: 78, 1952-53. *Pteris densa* Wall. Cat. 99, 1828.

Distribution: Himalayas.

Pteridrys syrmatica (Willd.) C. Chr. et Ching in Bull. Fan. Mem. Inst. Biol. Bot. 5: 131, t. 11, 17, 1934; Sledge in Kew Bull. 27: 424, 1972. *Aspidium syrmaticum* Willd. Sp. Pl. 5: 237, 1810.

Distribution: S. India.

Pteris almeidiana Bole et Almeida in Journ. Bomb. nat. Hist. Soc. 74: 320, 1977.

Distribution: Maharashtra.

Pteris confusa Walker in Evolution 12: 88, f. 4, top middle, 1958 (nomen et fig.) et in Kew Bull. 14: 329, fig. 5 a, t. 5, f. B. J., 1960; Nair et Ghosh in Journ. Bomb. nat. Hist. Soc. 73: 441, 1976 (1977).

Distribution: Kerala.

Pteris furunculata N. C. Nair et S. R. Ghosh in Journ. Ind. Bot. Soc. 55: 38, 1976.

Distribution: Kerala.

Pteris gongalensis Walker in Kew Bull. 14: 328, f. 4, 4 a, t. 5, f. A.G. 1960; Nair et Ghosh in Journ. Bomb. nat. Hist. Soc. 13: 441, 1976 (1977).

Distribution: Kerala.

Pteris heteromorpha Fée, Gen. Fil. 127, 1852; Hook. Sp. Fil. 2: 166, t. 127 B, 1858; Nair et Ghosh in Indian For. 104: 374-376, 1978.

Distribution: Orissa.

Pteris linearis Poir. Enc. 5: 723, 1804; Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15 (Pt. I-II): 114, 1964. *Pteris normalis* Don, Prod. Fl. Nepal 15, 1825. *Pteris nemoralis* Willd. Enum. 1073, 1809, Alston et Bonner in Candollea 15: 202, 1956.

Distribution: Darjeeling.

Pteris multiaurita Agardh, Rec. Sp. Gen. Pteridis 12, 1839; Walker in Kew Bull. 14: 323, 1960; Nair et Ghosh in Journ. Bomb. nat. Hist. Soc. 73: 440, 1976 (1977).

Distribution: Nilgiris; Kallar to Ponmudi (Trivandrum Dist.); Kiripara and Kodayar (Kanyakumari Dist.); Kulathupuzha (Quilon Dist.)

Pteris nemoralis Willd. Enum. 1073, 1809 et Sp. Pl. 386, 1810; Alston et Bonner in Candollea 15: 202, 1956; Nair et R. K. Ghosh in Journ. Ind. Bot. Soc. 54: 48, 1975.

Distribution: Orissa, Kerala.

Pteris nepalensis H. Ito in Hara Fl. East. Himal. 466, 1966.

Distribution: Himalayas.

Pteris praetermissa Walker in Kew Bull. 14: 327, f. 3. 3a, t. f, f. 1960; Nair et Ghosh

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In Journ. Bomb. nat. Hist. Soc. 73: 442, 1976 (1977).

Distribution: Kerala.

Pteris rigida Sod. Sert. Fl. Ecuad. II, 15, 1908 (non Swartz, 1806); Mehra et Bir in Res. Bull. (N.S.) Panjab Univ. 15: (Pt. I-II): 114, 1964.

Distribution: Lebong (Darjeeling).

Pteris roseo-lilacina Hieron in Hedw. 55: 350, 1914; Mehra et Bir in Res. Bull. (N.S.) Punjab Univ. 15: 55, 1964; Nair et Ghosh in Journ. Bomb. nat. Hist. Soc. 73: 424, 1977.

Distribution: Darjeeling, Ponmudi near Trivandrum.

Pteris setuloso-costulata Hayata, Icon. Fl. Formos. 4: 241, f. 168, 1914; Ito in Hara Fl. East Himal. 467, 1966.

Distribution: E. Himalaya (Nepal, Sikkim).

Pteris tremula R. Br. Prodr. Fl. N. Holl. 154, 1810; Nair et Ghosh in Journ. Bomb. nat. Hist. Soc. 73: 240, 1977.

Distribution: Shevaroy Hills.

Pyrrosia assimilis (Bak.) Ching in Bull. Chin. Bot. Soc. 1: 49, 1935. *Polypodium assimilis* Baker in Journ. Bot. 1875: 201, 1875.

Distribution: Himalayas.

Pyrrosia ceylanica (Gies.) Sledge in Bull. Brit. Mus. Nat. Hist. 2: 134, 1960. *Niphobolus ceylanicus* Gies. Farngatt. *Niphobolus* 216, 1901.

Distribution: Courg (Coorg).

Pyrrosia nayariana Ching et Chandra in Amer. Fern. Journ. 54: 62, 1964.

Distribution: Manipur.

Pyrrosia pekinensis (C. Chr.) Ching in Bull. Chin. Bot. Soc. 1: 51, 1935; Nishida in Journ. Coll. Arts Sci. Chiba Univ. 4: 580, 1966. *Cyclophorus pekinensis* C. Chr. Fil. 200, 1905. *Polypodium davidii* Baker, Ann. Bot. 5: 472, 1891.

Distribution: Himalayas.

Pyrrosia varia (Kaulf.) Farwell, Amer. Midl. Naturalist 12: 302, 1931; Nishida in Journ. Coll. Arts. Ci. Chiba Univ. 4(4): 580, 1966. *Niphobolus varius* Kaulfuss Enum. Fil. 125, 1824.

Distribution: Himalayas.

Salvinia auriculata Aubl. Hist. Pl. Guian 2: 969, t. 367, 1775; Kammathy in Sci. & Cult. 34: 396, 1968.

Distribution: Kerala.

Salvinia cucullata Roxb. [Wall. List. n. 399, 1828] ex Borry. Bel. Voy. Bot 2: 6, 1833, Roxb. in Calc. Journ. 4: 470, 1844; Pangiachi in Bull. Bot. Surv. India 2: 1960.

Distribution: E. India.

Salvinia molesta Mitchell in Br. Fern. Gaz. 10: 251, 1973; Cook et Gut PANS: 17: 438, 1977.

Distribution: Kerala.

Salvinia natans (Linn.) All. Fl. Pedem. 2: 289, 1785; Ito in Hara Fl. East. Himal. 500, 1966. *Marsilea natans* Linn. Sp. ed. 1, 2: 1099, 1753.

Distribution: Widely distributed in the warm regions of Europe to S.E. Asia.

Schizolegnia indica Bole et Almeida in Journ. Bomb. nat. Hist. Soc. 74: 325, 1977.

Distribution: North Canara.

Schizolegnia savantvadiensis Bole et Almeida in Journ. Bomb. nat. Hist. Soc. 74: 325, 1977.

Distribution: Charatha, Savantwadi, Maharashtra.

Sphenomeris chinensis (Linn.) Maxon var. *divaricata* (Christ) Kramer in Blumea 15: 672, 1968 et Gard. Bull. Sing. 26: 5, 1972.

Odontosoria chinensis (Linn.) J. Sm. var. *divaricata* Christ in Journ. de Bot. Ser. 2: 23, 1909.

Distribution: Assam, Sikkim.

Sphaerostephanos subtruncatus (Bory) Holtum in Kew Bull. 26: 80, 1972. *Polypodium subtruncatum* Bory in Bel. Voy. Ind. Or.

Bot. 2: 32, 1833. *Mesochlaena polycarpa* sensu Blatter et d' Almeida Ferns Bombay 41, a, b. 1922 non (Bl.) Bedd.

Distribution: South India, Bengal.

Stenogramma asplenoides J. Sm. ex Ching in *Sinensis* 7: 94, t. 2, 1936.

Distribution: Khasia, Assam.

Stenogramma leptogrammoides Iwatsuki in *Acta Phytotax. Geobot.* 19: 119, 1963.

Distribution: Sikkim.

Tapeinidium pinnatum (Cav.) C. Chr. Index Fil. 631, 1906; Kramer in *Blumea* 15: 553, 1967 et Gard. Bull. Sing. 26: 8, 1972. *Davallia pinnata* Cavanilles, Descr. 277, 1802 (non Mett. ex Kuhn, 1869) *Davallia serrata* Roxb. ex Griff. in *Calc. Journ.* 4: 514, 1844 (non Willd. 1810).

Distribution: Kerala.

Thelypteris multilineata (Wall. ex Hook.) Morton var. *bhutanica* Nair in *Bull. Bot. Surv. India* 11: 193, 1969.

Distribution: Bhutan.

Trichomanes latealatum (v.d. B.) Christ, Verh. Nat. Ges. Basel. 11: 424, 1896; Ghatak in *Bull. bot. Surv. India* 6: 93, 1964. *Didymoglossum latealatum* v.d.B. Ned. Kr. Arch. 5: 138, 1863.

Distribution: Shevaroy Hills (Tamil Nadu).

Trichomanes motleyi Bosch. Ned. Kruidk. Arch. 5: 145, 1961; Thothathri in *Journ. Bomb. nat. Hist. Soc.* 74: 251, 1977.

Distribution: Great Nicobar Islands.

Vandenboschia schmidiana (Zenk. ex Taschn.) Copel. in Philip. Journ. Sc. 67: 53, 1938. *Trichomanes schmidiana* Zenk. ex Tasch. Dissert. 34: t. 1, f. 1, 1843.

Distribution: Nilgiris.

Vittaria doniana Mett. in Hieron. in Hedw. 57: 204, 1915; Mehra et Bir in *Res. Bull. (N.S.) Punjab Univ.* 15 (Pt. I-II): 23, 1964.

Distribution: North Sikkim.

Vittaria ensiformis Sw. Gest. Nat. Fr. Berl. Neu. Schr. 2: 134, t. 7, 1799; Thothathri *et al.*

in *Journ. Bomb. nat. Hist. Soc.* 74: 251, 1977.

Distribution: Great Nicobar Islands.

Vittaria ensiformis Sw. var. *latifolia* Holtt. Panigr. in *Bull. Bot. Surv. India* 2: 314, 1960.

Distribution: Eastern India.

Vittaria forrestiana Ching in *Sinensis* 1: 191, f. 5, 1931; Ito in *Hara Fl. East. Himal.* 499, 1966.

Distribution: Himalayas.

Vittaria medisora Hayata, *Icon. Pl. Formos.* 5: 346, 1915; Ito in *Pteridophyta, Univ. Tokyo* 500, 1966.

Distribution: Himalayas.

Vittaria himalayensis Ching in *Sinensis* 1: 190, f. 5 B, 1931; Bir et Mehra in *Res. Bull. (N.S.) Punjab Univ.* 15 (pt. I-II): 23, 1964.

Distribution: Himalayas.

Vittaria taeniophylla Copel. in *Philip. Journ. Sci.* 1: Suppl. II, 157, 1906; Ito in *Hara Fl. East Himal.* 500, 1966.

Distribution: Himalayas.

Vittaria ophiopogonoides Ching in *Sinensis*, 1: 186, fig. 5 A, 1931; Mehra et Bir in *Res. Bull. (N.S.) Punjab Univ.* 15 (Pt. I-II) 24, 1964.

Distribution: Himalayas.

Woodisia cycloloba Hand.-Mzt. *Symb. Sin.* 6: 19, 1929; Ito in *Hara Fl. East. Himal.* 486, 1966.

Distribution: Himalayas.

Woodwardia unigemmata (Makino) Nakai in *Bot. Mag. Tokyo* 39: 103, 1925; Ito in Makino in *Journ. Jap. Bot.* 2: 7, 1918.

Distribution: Himalayas.

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